Attorney Docket No.: 1999-0353

B1

of broadband-based service platforms, provides flexibility to support current and future calling feature services, and provides high quality voice transmission.

IN THE CLAIMS

Amend claim 4 to read as follows:



4. (Amended) The two-way communication system of claim 3 wherein the public switched telephony network includes a billing system.

REMARKS

The Abstract has been amended responsive to \P 1 of the Office action of 03/20/2033 ("the Office action").

Claim 4 has been amended responsive to ¶ 2 of the Office action.

The rejection of the claims under 35 U.S.C. 102(e) and 35 U.S.C. 103(a) is respectfully traversed.

In particular, it is respectfully submitted that the claims do not read on Kim.

Turning first to claim 1, in particular, the Office action equates applicants' recited Internet Protocol Central Office with Kim's Public Switched Telephone Network PSTN 260. However, the Kim specification makes clear that the PSTN is definitely <u>not</u> an entity that operates using the Internet protocol. For example, the very the opening lines of Kim's Description of the Related Art contrasts a PSTN with the Internet:

A public switched telephone network (PSTN) supplying an audio communication service to a user has been used to supply local calls, long distance calls and international telephony services. <u>However</u>, with the increased use of the Internet, telephony service using the Internet has been developed and is being used. [col. 1, lines 21-26 (emphasis added).]

Attorney Docket No.: 1999-0353

Moreover, Kim teaches that calls are routed via the PSTN when there is no IP address for a called telephone. See, for example, col. 4, line 66 through col. 5, line 3 of Kim. This further makes clear that Kim's PSTN 260 cannot be said to correspond to applicants' recited Internet Protocol Central Office.

In addition, even if it were proper to equate applicants' recited Internet Protocol Central Office with Kim's PSTN 260, specific limitations in claim 1 would still not be met by the Kim disclosure. In particular, claim 1 recites that the High Speed Packet Network and the Internet Protocol Central Office are coupled to one another. The Office action equates applicants' recited High Speed Packet Network to Kim's Internet 254 and (as noted above) the Office action equates applicants' recited Internet Protocol Central Office to Kim's PSTN 260. Directly contrary to this claim language, Kim's Internet 254 and PSTN 260 are not coupled to one another, as can clearly be seen from Kim's FIG. 2.

Additionally, it is respectfully submitted that the Office action erroneously associates other recited elements of claim 1 with particular elements in Kim. It is clear, for example, that network segment 200 is not a residential gateway, as the Office action states, but, rather, an entire network segment that includes elements that both are on a customer premises, or "residence," and within a service provider's network.

Moreover, it is clear from Kim that cable modems 206 and 207 are located on the customer premises whereas router 216 is located in the service provider's network. The cable modems communicate via hubs 204 and 205 to headend unit 202. Clearly, then, modems 206 and 207 are not coupled to router 216. Kim thus does not meet the limitation in claim 1 of "a Cable Modem Bank coupled to an Edge Router." (claim 1, line 11.)

Moreover, claim 1 recites both an Internet Protocol Central Office and also an external network. Since two separate elements are recited in the claim, two separate elements would have to be pointed to in Kim as corresponding to them. However, the Office action points to PSTN 260 as being both an Internet Protocol Central Office and an external network. It is submitted that such a reading of the claim is improper.

Moreover, applicants find nothing in Kim suggesting that Kim's arrangement includes a Hybrid Fiber Coaxial Network. Indeed, the Office action does not indicate

Attorney Docket No.: 1999-0353

which elements in Kim are regarded by the examiner as corresponding to the recited Hybrid Fiber Coaxial Network.

Applicants' other independent claims 7, 11 and 15 do not contain all of the same limitations as claim 1. Thus not all of the above-mentioned distinguishing aspects of the invention as defined in claim 1 apply to those other independent claims. However, many of those distinguishing aspects <u>do</u> appear in claims 7, 11 and 15 and thus those claims are also submitted to distinguish the invention from Kim.

In view of the foregoing, it is submitted that each of applicants' independent claims 1, 7, 11 and 15—and thus <u>all</u> of the claims in the application—distinguish the invention from Kim and are allowable. It is thus not necessary at this time for applicants to address the question of whether it would have been obvious to a person of ordinary skill in the art to combine the teachings of Kim and LaPier et al in the manner suggested in the Office action or whether any of applicants' claims would read on any such combination.

Reconsideration is requested.

Respectfully submitted,

Fen-Chung Kung et al

Ronald D. Slusky Antorney for Applicant

Reg. No. 26,585

(732) 249-0900

Law Office of Ronald D. Slusky P.O. Box 4378 Highland Park, New Jersey 08904-4378

Date: 06/18/2003

Attorney Docket No.: 1999-0353

VERSION WITH MARKINGS TO SHOW CHANGES

IN THE SPECIFICATION

Amend the Abstract to read as follows:

The present invention provides a system and method for a reliable, low-cost, secure Internet Protocol (IP) based network that provides broadband-based voice communications as well as video and data communications. The IP network is arranged to function with the infrastructure of the Public Switched Telephone Network (PSTN), to control telephone calls in SS7 type networks and to provide the features, applications, and services of the typical SS7 networks in a voice over IP network. The present invention supports much larger cost large effective call volumes than the present network systems, allows accommodation of a wide range of broadband-based service platforms, provides flexibility to support current and future calling feature services, and provides high quality voice transmission.

IN THE CLAIMS

Amend claim 4 to read as follows:

- 1 4. (Amended) The two-way communication system of claim 1 wherein the
- 2 external network of claim-3 wherein the public switched telephony network includes a
- 3 billing system.

